LoRaWAN Analog Sensor

PS-LB-NA

OVERVIEW:

The Dragino PS-LB-NA is a LoRaWAN Analog Sensor for Internet of Things solution. PS-LB-NA has 5v and 12v output , 4~20mA, 0~30v input interface to power and get value from Analog Sensor. PS-LB-NA will convert the Analog Value to LoRaWAN wireless data and send to IoT platform via LoRaWAN gateway.

The LoRa wireless technology used in PS-LB-NA allows device to send data and reach extremely long ranges at low data-rates. It provides ultra-long range spread spectrum communication and high interference immunity whilst minimizing current consumption.

PS-LB-NA supports BLE configure and wireless OTA update which make user easy to use.

PS-LB-NA is powered by 8500mAh Li-SOCl2 battery, it is designed for long term use up to 5 years.

Each PS-LB-NA is pre-load with a set of unique keys for LoRaWAN registrations, register these keys to local LoRaWAN server and it will auto connect after power on.

Features:

- LoRaWAN 1.0.3 Class A
- Ultra-low power consumption
- 1 x 0~20mA input , 1 x 0~30v input
- 5v and 12v output to power external sensor
- Monitor Battery Level
- Bands: CN470/EU433/KR920/US915/EU868/AS923/AU915/IN865
- Support BLE and LoRaWAN remote configure.
- Support wireless OTA update firmware
- Uplink on periodically
- Downlink to change configure
- 8500mAh Battery for long term use

Order Info:

Part Number: PS-LB-NA-XX-YY

XX:

- Frequency Bands, options: EU433,CN470, EU868,IN865,KR920,AS923,AU915,US915

YY:

- M12: M12 hole
- M16: M16 hole
- M20: M20 hole

Specification:

Micro Controller:
- MCU: 48Mhz ARM
- Flash: 256KB
- RAM: 64KB

Common DC Characteristics:
- Supply Voltage: 2.5v ~ 3.6v
- Operating Temperature: -40 ~ 85°C

LoRa Spec:
- Frequency Range, Band 1 (HF): 862 ~ 1020 Mhz
- Max +22 dBm constant RF output vs.
- RX sensitivity: down to -139 dBm.
- Excellent blocking immunity.

Current Input Measuring :
- Range: 0 ~ 20mA
- Accuracy: 0.02mA
- Resolution: 0.001mA

Voltage Input Measuring:
- Range: 0 ~ 30v
- Accuracy: 0.02v
- Resolution: 0.001v

Battery:
- Li/SOCl2 un-chargeable battery
- Capacity: 8500mAh
- Self-Discharge: <1% / Year @ 25°C
- Max continuously current: 130mA
- Max boost current: 2A, 1 second

Power Consumption:
- Sleep Mode: 5uA @ 3.3v
- LoRa Transmit Mode: 125mA @ 20dBm, 82mA @ 14dBm